



National Renewable Energy Laboratory (NREL)

Site Description: NREL was established by the Solar Energy Research Development and Demonstration Act of 1974. Originally called the Solar Energy Research Institute, NREL began operating in July 1977 and was designated a national laboratory of the U.S. Department of Energy (DOE) in September 1991. NREL's major research facilities are located on a 325-acre campus at the foot of

South Table Mountain in Golden, Colorado, and its administrative offices occupy leased space in Denver West Office Park. NREL also operates the 280-acre National Wind Technology Center located 15 miles north of the South Table Mountain site.

Mission: NREL provides national leadership toward a sustainable energy future by developing renewable energy technologies, improving energy efficiency, advancing related science and engineering, and facilitating commercialization. Scientific investigations in almost 50 areas include photovoltaics, wind energy, biomass-derived fuels and chemicals, energy-efficient buildings, advanced vehicles, solar manufacturing, industrial processes, solar thermal systems, hydrogen fuel cells, superconductivity, and geothermal and waste-to-energy technologies.

Management: The Office of Energy Efficiency and Renewable Energy (EE) is the responsible program secretarial office for NREL. Within EE, the Golden Field Office (GO) administers the management and operating contract. NREL is a national laboratory owned by DOE and managed by Midwest Research Institute, Battelle Memorial Institute, and Bechtel National Inc. NREL employs about 800 researchers, engineers, analysts, and administrative staff. In addition, approximately 200 visiting professionals, graduate students, interns, and temporary personnel can be found at NREL's main campus at various times throughout the year.

Budget: NREL's budget authority was \$191 million for FY 1999. Approximately 95% of NREL's program is funded by EE, with the Office of Science and reimbursable work accounting for the remaining 5%. It is anticipated that FY 2000 funding will be slightly lower than FY 1999.

Integrated Safety Management (ISM) Implementation Status: An Integrated Safety Management Verification was conducted of the DOE Golden Field Office (GO) and the National Renewable Energy Laboratory (NREL) November 1-10, 1999. The ISM Verification team recommended approval of NREL's ISM System Description and full approval of GO's systems upon completion of corrective actions stemming from a recent self-assessment. GO's and NREL's current goal is to complete all recommended ISM improvements and forward certification of these actions to the Secretary's Office in Spring of 2000.

Significant Events: No significant environment, safety, and health related events have been reported for NREL over the past two years.

Key Facilities

Facility Name	Mission /Status	Principal Hazards
Solar Energy Research Facility	Photovoltaics, superconductivity, and materials science	Small quantities of highly toxic and pyrophoric materials, lasers, x-ray generators
Field Test Laboratory Building	Alternative fuels, biomass-derived chemicals, and genetic engineering	Small quantities of hazardous materials, minimal quantities of radioactive materials
Thermal Test Facility	Buildings research and energy efficiency	Minimal electrical and physical hazards
Photovoltaic Outdoor Test Facility	Photovoltaic modules and systems	Electrical and physical hazards presented by photovoltaic panels
Alternative Fuels User Facility and Process Development Unit	Development of biomass-derived fuels	Small to moderate quantities of flammable and corrosive materials
Solar Furnace and Solar Radiation Research Laboratory	Explore use of concentrated sunlight to manufacture advanced materials	Concentrated light and heat
National Wind Technology Center	Improve wind turbine technology	Electrical and mechanical hazards; working at heights

For NREL information, contact the Golden Field Office at (303) 275-4785